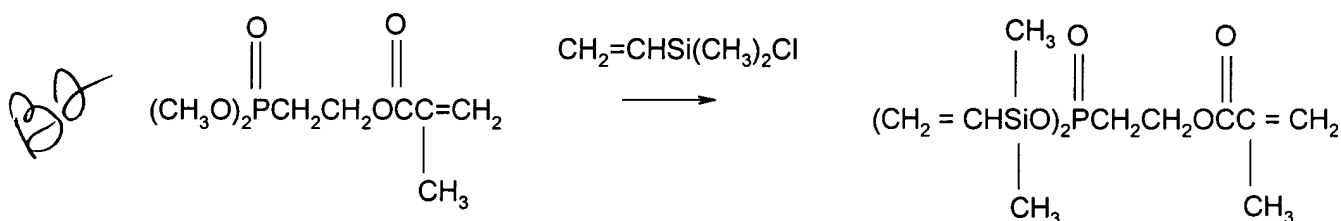


In order to make an especially active phosphonating species, the dimethyl ester of methacryl phosphonate was reacted with a silanating agent to form the hydrolytically unstable vinyl dimethyl silyl ester. The silanating agent can be a chloride, as shown below, or a bromide.



In the claims:

Please cancel claims 21-26, 33-38

- Sub C1
- B3
1. (Amended) Functionalized zirconium oxide particles comprising:
a surface comprising a total quantity of hydroxyl groups comprising a complexed fraction comprising a reactive portion and a less reactive portion;
said reactive portion being complexed with functionalities selected from the group consisting of functionalities with high steric hindrance, functionalities with low steric hindrance, and a combination thereof;
said less reactive portion being complexed with said groups having a low steric hindrance.
 2. (Amended) The functionalized zirconium oxide particles of claim 1 wherein said functionalities having a low steric hindrance comprise mobile adhesion promoters and said functionalities having a high steric hindrance comprise organofunctional coupling agents.